



Power Lite Lithium Battery System L051100-A



INSTALLATION MANUAL

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1. INTRODUCTION

Thank you for choosing Sunsynk's energy storage system.

The energy storage module includes lithium-ion rechargeable batteries with 5.12kWh capacity, and the controller enables a central of multiple modules.

This manual provides information regarding safety precautions to prevent possible accidents and how to use the product. Please read this manual carefully before use for safety and keep this manual handy for reference.

Some main features of this product are:

■ Long Life Span

The battery can be expected to remain serviceable for more than 10 years, considering that it is charged and discharged once in a day at room temperature (25°C).

■ Stable

Olivine-type lithium iron phosphate batteries with excellent thermal stability and storage characteristics are used in this product. The module also incorporates a self-monitoring function for the detection of any abnormalities in energy storage.

■ Compact Design

The height is nicely designed in 3U, in favour of standard industrial applications.

■ High Scalability

Multiple energy storage modules can be connected in parallel, and the capacity can be customized according to the intended use.

2. SAFETY

Sunsynk's products are designed with full consideration of safety. However, all electrical appliances can be dangerous if used inappropriately; it can cause a fire or electric shock that leads to severe injury or death. For your protection, please read these safety precautions thoroughly.

2.1. Transportation

Lithium Ferro Phosphate Batteries are classed as Dangerous Goods (DG) Class 9 UN3480. It is forbidden to subject the product to serious vibration and shock during transportation.

2.2. Installation Location

This battery set is to be installed only indoors.

- The product should not be exposed the product to temperatures above or below the ambient temperature rating specified in this manual.
- The battery should not be installed in direct sunlight.

2.3. Storage



If the system is not placed to use, the system must be properly stored. Otherwise, Sunsynk shall not be liable for any issues.

- It should be stored in 60% SoC status.
- It should be stored in a ventilated environment, Temp. < 35°C, RoH <65%.
- It should be stored avoiding humid condition.
- It should be stored in place where professionals can monitor by the system.

2.4. General Safety

Definitions of Symbols:

Below are symbols used in this manual and the unit.
Please read through the following definitions before reading the manual.

	Warning	If you ignore these instructions, it can lead to a fire or electric shock causing serious injury or death.
	Caution	If you ignore these instructions, it can lead to electric shock or other accidents causing injury or harm to nearby products.

- Wear insulating gloves and protection glasses during installation and connection of the set to prevent electric shock or other injuries.
- Water and/or foreign objects inside the module are not allowed.
- The product should not be disassembled. Opening and modifying the set can cause a fire or electric shock.
- The cables should not be damaged. If you damage a cable, it can cause a fire or electric shock.
- The battery should not be punch a hole in the product.
- DO NOT touch with wet hands. If you touch the equipment with wet hands, it may cause electric shock.
- The vent should not be covered. If the vent is covered, the product can overheat and cause a fire.
- Keep the product away from children and animals.
- DO NOT put anything, stand or sit on the battery set. If you put anything on the set, it may fall and cause injury.

2.5. Handling

- The battery should only be used as instructed.
- DO NOT use the battery if it seems broken or damaged.
- The battery is non-user-serviceable and should not be opened for repair.
- Handle battery with care when installing or transporting.
- Chemicals should not be used to clean the battery.

2.6. Damaged Battery

A damaged battery should not be used and should be returned to Sunsynk or properly discarded via a recycling facility. Leaking electrolytes can cause skin irruption and chemical burns, so contact should be avoided.

Eye	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin	Remove contaminated clothes and rinse skin with plenty of water or shower for 15 minutes. Get medical aid.
Inhalation	Remove from exposure and move to fresh air immediately. Use oxygen if available.
Ingestion	Give at least two glasses of milk or water. Induce vomiting unless the patient is unconscious. Call a physician.

2.7. Fire

If the battery catches fire, a dry agent extinguisher must be available and used. DO NOT use water. Evacuate the area and call emergency services. Toxic gas may be produced if the battery catches fire.

2.8. Qualified Personnel

Be aware that only qualified professionals should install the product.

A qualified person is one who has skills and knowledge related to the construction and operation of the electrical equipment and has received safety training on the hazards involved. It is authorized to energise, ground, and tag equipment systems and circuits in accordance with established safety procedures. The inverter and end-using system may only be commissioned by qualified personnel.

3. SPECIFICATIONS AND FUNCTIONS

3.1. Dimensions and Weigh

L051100-A dimensions are presented in Figure 1. It is well designed for 19-inch cabinet.

Power Lite Lithium Battery System L051100-A	
Depth	530mm
Width	440mm
Height	132mm
Weight	48kg

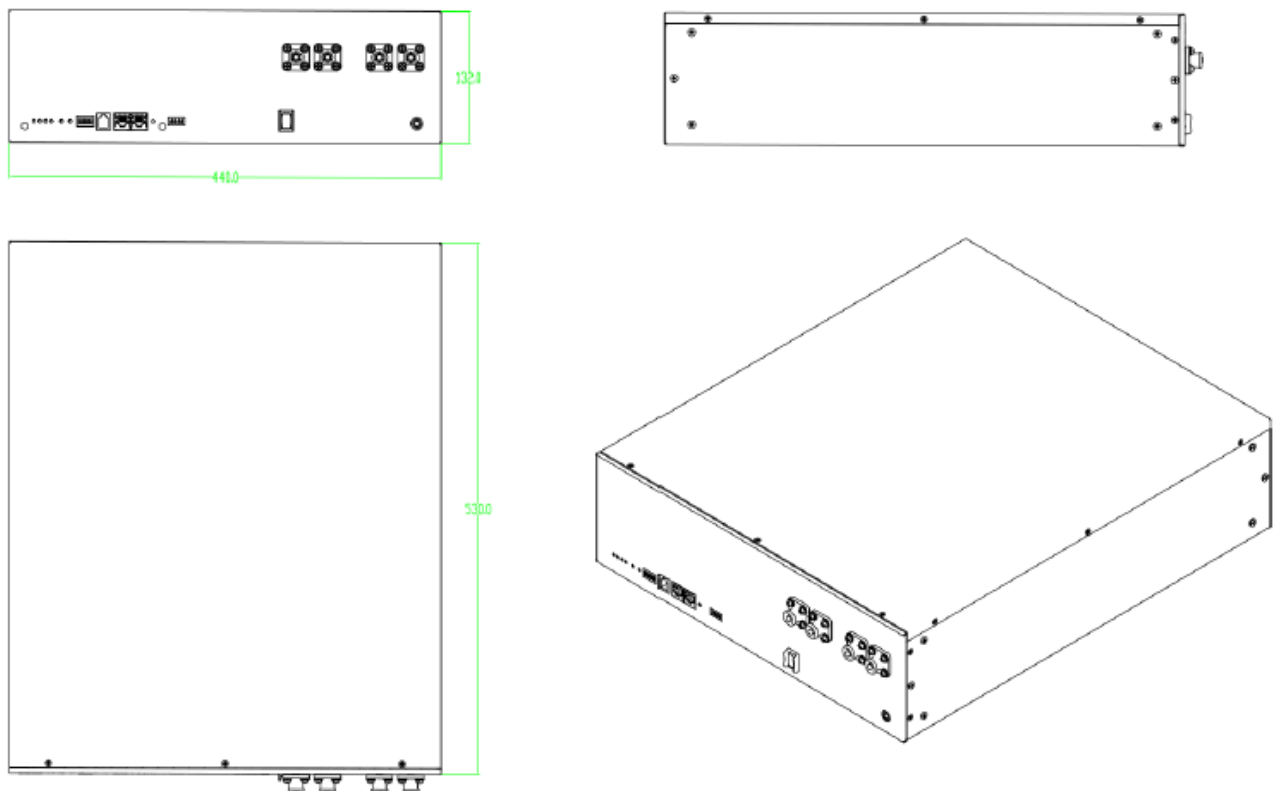


Figure 1 - L051100-A dimensions

3.2. Specifications

Power Lite Lithium Battery System L051100-A	
Cell Type	Lithium Ferro Phosphate (LifePO4 or LFP)
Nominal Operating Voltage	51.2V
Nominal Capacity	100Ah / 5.12kWh
Depth of Discharge (DoD)	100%
Usable Capacity	5.12kWh
Packing	1P16S
IP Rating	IP20
Minimum Operating Voltage	44.8V
Maximum Operating Voltage	57.6V
Standard Charging Current	50A
Max. Continuous Charging Current	50A
Standard Discharging Current	50A
Max. Continuous Discharging Current	100A (1C, 25°C ± 2°C)
Max. Pulse Discharging Current	200A (2C, 30S, 25°C ± 2°C SOC≥40%)
Standard Charging Method	0.5C CC to 57.6V, CV at 57.6V till current is 0.05C
Min. Operating Temperature (no derating)	Charging: 0°C / Discharging: -20°C
Max. Operating Temperature (no derating)	Charging: 50°C / Discharging: 55°C
Operating ROH	20% ~ 80%
Storage Temperature	-20 ~ 50°C
Self-discharging rate	≤5% (25°C, 50% SoC)
SoC @ end of product line	40%
Insulation Resistance	>100MΩ
Voltage Difference in each module	≤20mV
Inner Resistance of single Cell	0.34 ± 0.05mΩ (fresh cell 30 ~ 40% SoC)
Altitude	Below 2000m
Weight	48kg
Dimensions	440 x 530 x 132mm (not include connector, MSD and other parts)
Expected Life @ 25°C	Greater than 10 years if used as per warranty terms

3.3. System Introduction

L051100-A Energy Storage System is consisted of 2 sets of M025100-A modules manufactured by Sunsynk. In each M025100-A, there are 8 pcs of 100 Ah LFP cell originated from CATL. The overall system also provides standard communication port, i.e. CAN and RS485, to monitor the working status and communicate with upper machine as well as the Power Conversion System (PCS) in front. The system schematic drawing is presented in Figure 2.

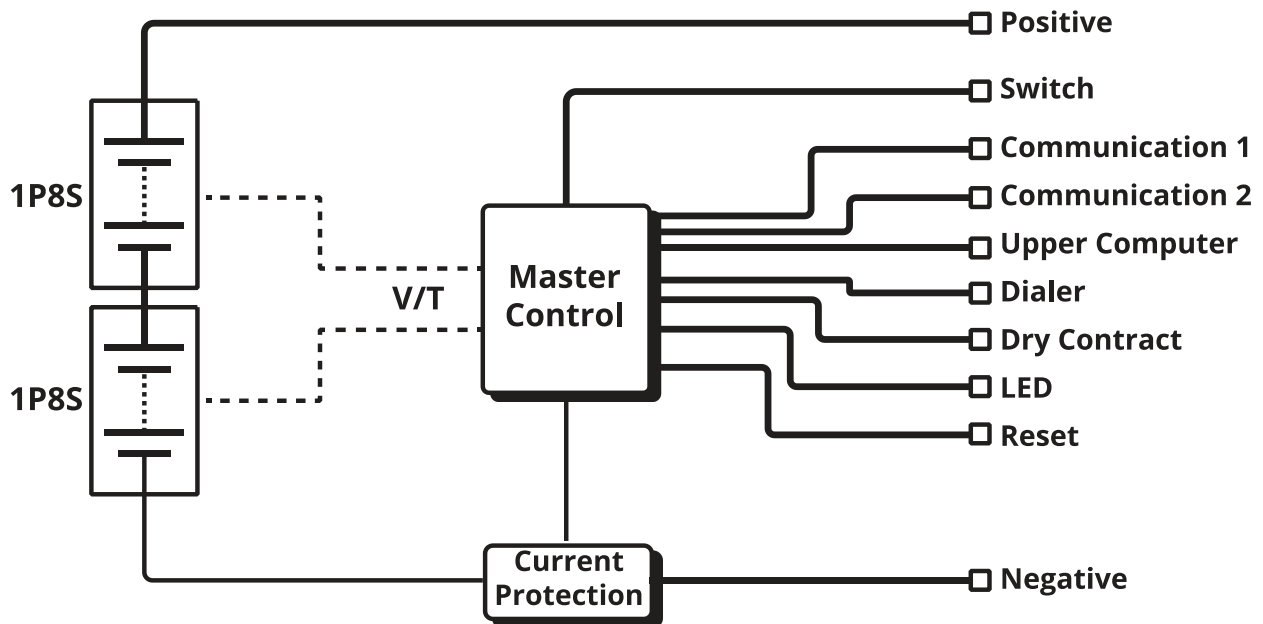


Figure 2 - System schematics

4. INSTALLATION

4.1. Installation Location Environment

The location of the battery should be in accordance with operating temperature range and IP rating specified in the Specification section of this manual. Although the batteries run at a low temperature, proper airflow around the batteries is recommended.

When installing the set, the following conditions should be met:

- DO NOT install the product in a completely closed area with no air-conditioning, it can overheat and cause a fire.
- DO NOT place in direct sunlight or near a source of heat. This can cause deformation, a breakdown, or a fire. Pay extra attention when you place the system near windows.
- The battery must not be set where excessive oil smoke, steam, moisture or dust is contained in the air.
- Ensure that the batteries are installed in a clean environment with minimal dust.
- Avoid installing the set near the ocean. If unavoidable, appropriate air filtration should be used to prevent salt air in contact with the batteries.
- For proper air circulation to dissipate heat, allow a clearance of approximately 30 cm to the sides.
- DO NOT install the set near heat sources.

If the batteries are being installed in areas of extreme humidity levels, take the following precautions:

- A humidity control agent is must be placed inside the enclosure, with controlled airflow to expel moist air, and/or, the system can be installed in proper room with humidity control.

The L051100-A battery is well designed to be installed in a 19-inch cabinet. If the battery is going to be installed outdoors, a suitable IP54 or above enclosure must be used.

4.2. Front View

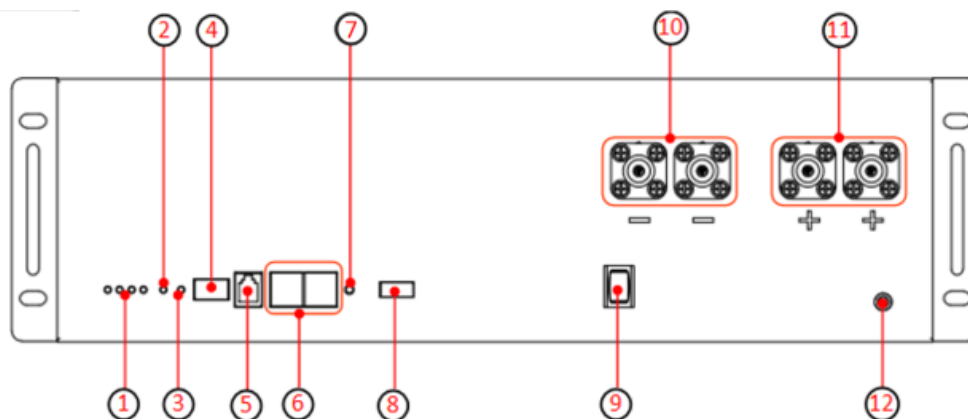


Figure 3 - Front view of the L051100-A

Item	Name	Model	Remarks
1	SOC LED x4		
2	Alarm LED		
3	RUN LED		
4	Dialer		
5	Communication port	RJ11	RS232 To upper machine
6	Communication port *2	RJ45	CAN To PCS RS485 Internal Connection
7	Reset		Waken system from malfunction status
8	Dry Contact		
9	Power On/Off Switch		
10	Port Negative x2	PSR6XAB	Black 5.7, 25mm ²
11	Port Positive x2	PSR6XBB	Orange 5.7, 25mm ²
12	GND	M6	Yellow-Green, 10AWG

4.3. Recommended DC Breaker

The following circuit breaker models (purchased separately) are supported:

Circuit Breaker Model	Rating	Certificate
Nader NDB1-125	100 A	CCC, CE, CB, TUV, UL1077

NOTE: a DC Breaker is required for each positive and negative terminal connecting

4.4. DC Cable Requirements

Size	Outer Diameter	Max. Voltage	Max. Current
21-33 mm ²	10-12 mm	1000 V	120 A



Caution

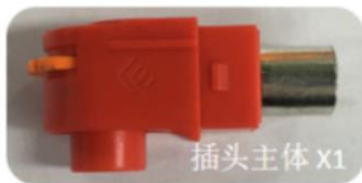
DC cable must be a multicore wire.

4.5. DC Cable Mounting



- Turn off system before doing electrical connection
- Ensure all the cables are in electrical safe condition

4.5.1 Material List



Plug



Isolation Cap



Tail-hood

4.5.2 Steps

1. Put wire through isolation cap and Tail-Hood.



2. Swipe outer isolation layer of DC cable.



3. The is used for the positive, and the negative for the black contact. The end of the cable is bunched at the terminal using a wire clamp.



4. Tighten the isolation cap and plug contact.



5. Put the positive and negative plug on to the system and tighten it.
6. Use isolation cap for unused DC plug.

4.6. DC Cable Connection

4.6.1 Single Unit

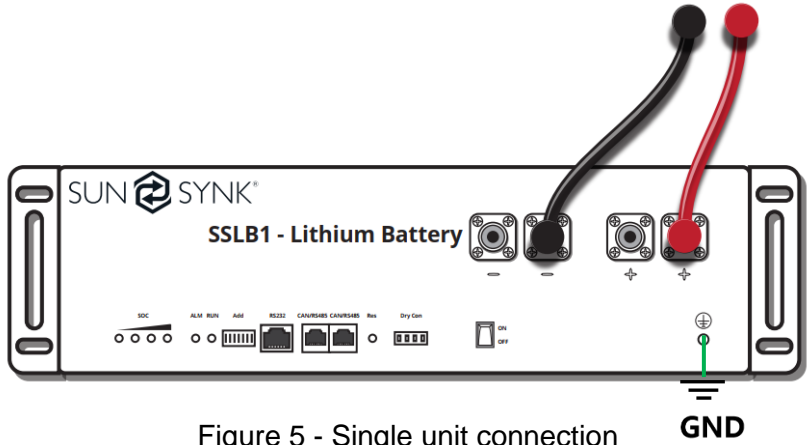


Figure 5 - Single unit connection

4.6.2 Multi-Units in Parallel (4 sets as an example)

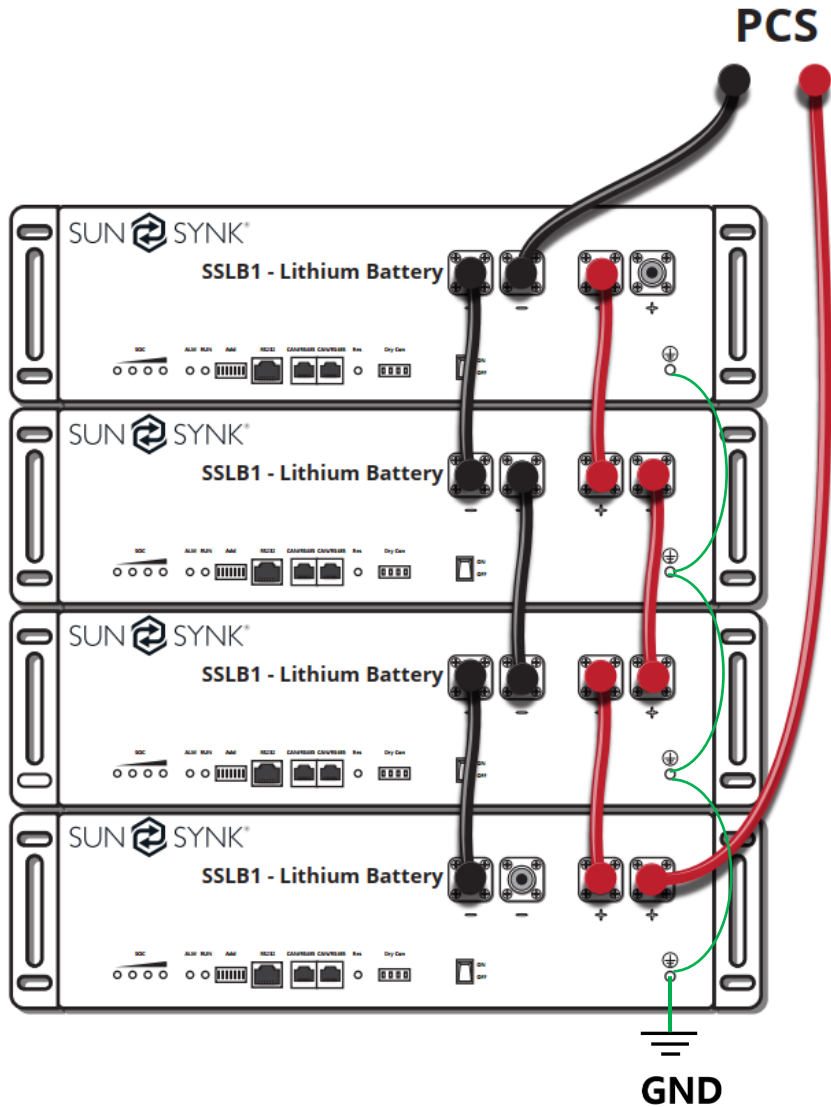


Figure 6 - Multi-Units Connection

Master Pack and Slave Pack L051100-A can be used as single unit as well as multi-units (in parallel) mode. The customer must inform supplier if multi-units mode is required. The Master Pack can be used individually, but Slave Pack cannot be used individually. Each battery can be set as the master or the slave by changing DIP address configuration. Please refer to the attached best practice guide document.

4.6.3. Method to set up Master Pack and Slave Pack

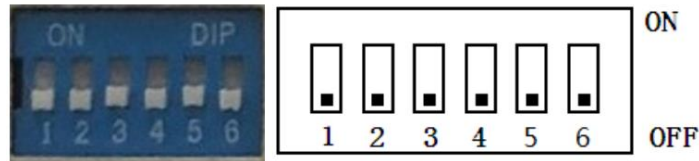
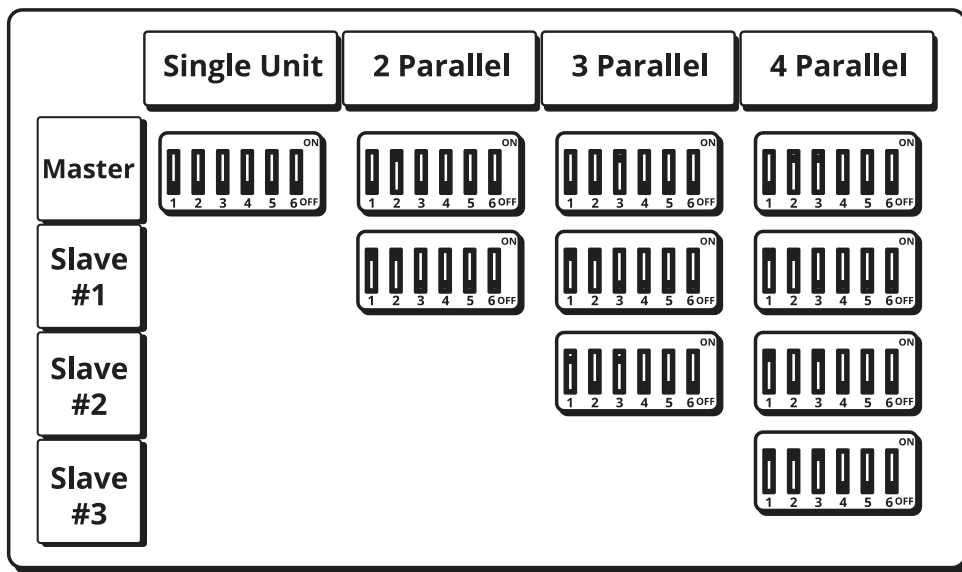
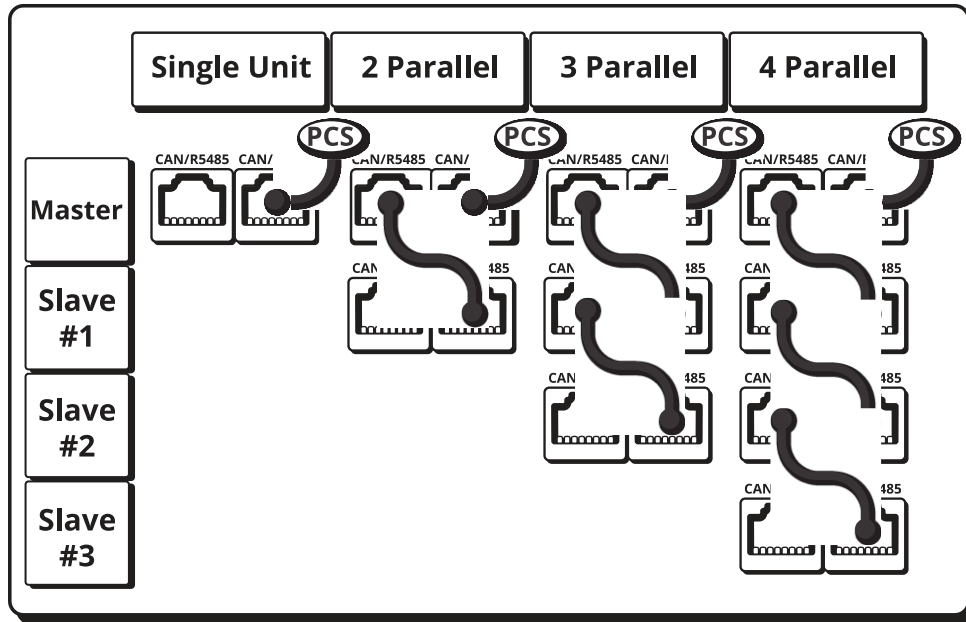


Figure 7 - Dial diagram

Master/slave machine dial code diagram:





4.7. Communication

4.7.1. Definition of Voltage Sampling Connector

PIN	Wire No.	Signal	Wire size (mm ²)	Remarks
1	B0	Signal	0.3	Cell #1-
2	B2+	Signal	0.3	Cell #2+
3	B4+	Signal	0.3	Cell #4+
4	B6+	Signal	0.3	Cell #6+
5	B8+	Signal	0.3	Cell #8+
6	B10+	Signal	0.3	Cell #10+
7	B12+	Signal	0.3	Cell #12+
8	B14+	Signal	0.3	Cell #14+
9	B16+	Signal	0.3	Cell #16+
10	NC	NC	NC	NC
11	B1+	Signal	0.3	Cell #1+
12	B3+	Signal	0.3	Cell #3+
13	B5+	Signal	0.3	Cell #5+
14	B7+	Signal	0.3	Cell #7+
15	B9+	Signal	0.3	Cell #9+
16	B11+	Signal	0.3	Cell #11+
17	B13+	Signal	0.3	Cell #13+
18	B15+	Signal	0.3	Cell #15+

4.7.2. Definition of Temp. Sampling Connector

PIN	Wire No.	Signal	Wire size (mm ²)	Remarks
1	T1+	Signal	0.3	Temp. #1+
2	T2+	Signal	0.3	Temp. #2+
3	T3+	Signal	0.3	Temp. #3+
4	T4+	Signal	0.3	Temp. #4+
5	T1-	Signal	0.3	Temp. #1-
6	T2-	Signal	0.3	Temp. #2-
7	T3-	Signal	0.3	Temp. #3-
8	T4-	Signal	0.3	Temp. #4-

4.7.3 Port RS485 and RS232

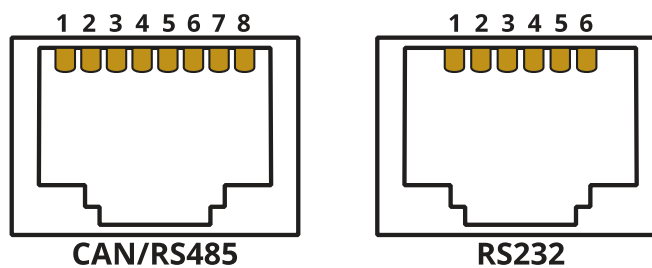


Figure 4 - CAN/RS485 and RS232 connections

	Description
CAN	Pin 1 : CAN-H Pin 5 : CAN-L Pin 2, 3, 4, 6, 7 : NC Pin 8 : GND
RS485	Pin 1, 4, 5 : NC Pin 2, 7 : RS485-A Pin 3, 6 : RS485-B Pin 8 : GND
RS232	Pin 1, 2, 6 : NC Pin 3 : BMS transmit; Computer receiver Pin 4 : BMS receiver; Computer transmit Pin 5 : GND

5. BATTERY OPERATION AND COMMISSIONING

Before turning on the batteries, please check the installation:

- Check the polarities of the batteries.
- Check if there are no damaged cables.
- Check for local installation compliance.
- Check if appropriate air flow is provided to the set.

5.1. System Power ON

- Installation (including DC cable, communication wire connection, dialer switch, and circuit breaker) is properly down.
- Press Power Switch button and then the external circuit breaker, the green LED should be twinkling and then turn into function mode. (system status can be red from LED signal, as shown below)

5.2. System Power OFF

Attention: It must be confirmed that the system is off before taking off DC cables.

Press Power Switch button

Green LED should be twinkling and then turn into stop mode

5.3. Sleep and wake up function

Number	Sleep Condition	Wake up Condition	Mark
1	Forced sleep by upper computer	Reset button	

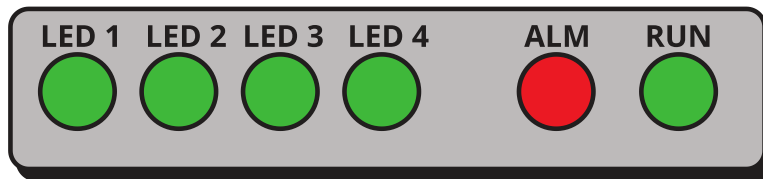
2	Forced sleep by soft switch	Soft switch,	Only those equipped with soft switch can pass the call Wake up
3	Total Voltage is lower than 48V or monomer is lower than 2.8V, and continuous No charge and discharge current for 4 hours, no communication goes to sleep	Reset button, Soft switch, Communication, Charging	Only those equipped with soft switch can pass the call Wake up

5.4. Buzzer function

- 0.25s per 1s in case of fault
- 0.25s per 2S during protection

5.5. System Status Instruction

There are 6 LED indicator, 4 green LED gives status of SoC, 1 red Alarm LED and 1 green Running Status LED (indicating charging, discharging etc.)







Status	Normal/Warning/Protection	RUN	ALM	SoC				Remarks
		●	●	●	●	●	●	
Power Off	Hibernate	no	no	no	no	no	no	ALL No
Standby	Normal	Twinkle 1	no	Real SoC				Standby
	Warning	Twinkle 1	no					
Charging	Normal	Twinkle 2	no					
	Warning	Twinkle 2	no					
	Overcharging	Twinkle 1	no					
	Overheat, Over-current, Low Temp.	Twinkle 1	Twinkle 2					
Discharging	Normal	Continuous	no					
	Warning	Continuous	no					
	Over-discharging	Twinkle 1	no					
	Overheat, Low Temp., Over-current, Shortcut	Twinkle 1	Twinkle 2					
Charging/Discharging/Standby	Abnormal	Twinkle at current state	Twinkle 3					If the slave is disconnected or disconnected, the slave ALM light Twinkle;
	Fault	no	Continuous	no	no	no	no	Fault refers to the hardware fault of BMS voltage calibration device, charging MOS damage, temperature sensor disconnection, etc

5.6. LED Twinkle Status

Status	On	Off
Twinkle 1	0.25S	3.75S
Twinkle 2	0.5S	0.5S
Twinkle 3	0.5S	1.5S

5.7. SoC indicator

SoC	LED			
				
	LED1	LED2	LED3	LED4
0~25%	On	OFF	OFF	OFF
25%~50%	On	On	OFF	OFF
50%~75%	On	On	On	OFF
75%~100%	On	On	On	On

6. TROUBLESHOOTING

The Power Lite L051100-A battery set is designed as a lead-acid replacement energy storage solution to run with most systems. Lithium batteries have a much higher density related to lead-acid batteries, and they utilise the settings and protections built into the ancillary equipment, the BMS.

When the operation of the battery is outside limits, the BMS activates in order to provide safe operation.

During normal operation, there will be a voltage across the terminals of the batteries. If the BMS activates its protection circuit, the battery should restart without external assistance once the fault is cleared. The scenario where this may not occur is on low volt disconnect. In this case, the battery circuit breaker will need to be turned off and on again to restart the BMS.

In rare cases in which the voltage does not recover, it is necessary to apply an external power source to the battery output terminal, which will allow the battery to charge up above the BMS low voltage cut off. Once the voltage rises above this point, the BMS will make the battery operate normally.

7. MAINTENANCE

The Power Lite L051100-A is maintenance free, however as part of your overall system maintenance, some verifications can be conducted.

- Check LED indicators.
- Check for any obstruction placed around the battery.
- Check battery connections and cables for secure fitting or damage.
- Check circuit breakers by turning them off and on again.

8. WARRANTY

8.1. Warrantor

Warrantor is **Sunsynk Ltd**, located at **3-Floor, Wai Yip Industrial Building, 171 Wai Yip Street, Kwun Tong, Kowloon, Hong Kong S.A.R.**

8.2. Products

The following limited warranty terms and conditions ('Factory Warranty') apply exclusively to **Sunsynk Ltd's** products of the following types ('Covered Products'):

Power Lite Lithium Battery System L051100-A

Valid Date from:

which:

- were manufactured by and bear the original manufacturing label of **Sunsynk Ltd**.

- were sold by **Sunsynk Ltd** directly or through a certified **Sunsynk Ltd** dealer ('Authorised Dealer') as new products in the world;
- were installed and commissioned by an Authorised, Certified Dealer in the world.

8.3. Product Warranty

For Covered Products, **Sunsynk Ltd** covers all defects in workmanship and materials during the Warranty Period under normal application, installation, use and service conditions as specified in **Sunsynk Ltd's** standard product documentation, and subject to the conditions listed below ('Product Warranty'). The Product Warranty is not intended to be a durability warranty, as end-user conditions and usage is variable. **Sunsynk Ltd** specifically disclaims any warranty to include specific components in any product or service.

8.4. Performance Warranty

Sunsynk Ltd guarantees that the actual storing capacity of the original battery pack included in the Covered Product ('Power Lite L051100-A') will be not less than 70% of the labelled storing capacity.

8.5. Warranty Obligations

- a) During the Warranty Period, **Sunsynk Ltd** will, at its option, repair the defective parts (if economically feasible) or replace the defective part free of charge, provided that you properly notify **Sunsynk Ltd** of the product defect within the Warranty Period, and provided that **Sunsynk Ltd**, through inspection, establishes the existence of a defect covered by this Limited Warranty.
- b) **Sunsynk Ltd** will, at its option, use new and/or reconditioned parts in building replacement parts. **Sunsynk Ltd** reserves the right to use parts or products of original or improved design in the repair or replacement of your product. If **Sunsynk Ltd** repairs or replaces a product part, its warranty continues for the remaining portion of the Warranty Period or 90 days from the date of the repair or replacement, whichever is greater.
- c) This Factory Warranty covers **Sunsynk Ltd** costs for materials necessary to re-establish trouble free operation of the Covered Product. This Factory Warranty does NOT cover, however, costs of installation, cost of removal, cost of labour for repair, cost of shipping or cost of reinstallation of a Covered Product or parts thereof.
- d) In the event of a defect of products or services supplied by **Sunsynk Ltd**, Customer's sole remedy shall be, at **Sunsynk Ltd's** cost and expense up to 100% of the cost of the equipment, (a) repair or replacement of defective product at **Sunsynk Ltd's** discretion, or (b) re-performance of defective services.

- e) Except for visible defects of products and services for which Customer shall provide notice to **Sunsynk Ltd** immediately under Section 6.3 of **Sunsynk Ltd's** Terms & Conditions, Customer shall provide written notice of any defect to **Sunsynk Ltd** within 10 days after discovery of such defect.
- f) Should **Sunsynk Ltd** be unable to repair or replace defective products or re-perform defective services to the agreed-upon standard within 30 days after written notice from Customer of such defect, Customer shall grant **Sunsynk Ltd** a 10 -day cure period in writing. Should **Sunsynk Ltd** fail to replace defective products or re-perform defective services to the agreed-upon standard within such 10 day cure period after written notice from Customer, Customer shall have the right to rescind the contract and **Sunsynk Ltd** shall promptly reimburse Customer for all invoices paid to **Sunsynk Ltd** on account of such defective product(s) or service(s).
- g) **Sunsynk Ltd's** liability with respect to any product, including without limitation **Sunsynk Ltd** obligation to repair or replace defective products or to re-perform defective services, shall be excluded if (a) Customer fails to inspect products or services as required under Section 6.4 of **Sunsynk Ltd's** Terms & Conditions or elsewhere in those Terms, (b) Customer fails to inform **Sunsynk Ltd** about defects as required under Sections 6.4 of the Terms & Conditions or section (e) or (f) above or elsewhere in this Warranty document, (c) Customer fails to observe product operating and maintenance instructions provided by **Sunsynk Ltd**, (d) any product or product part has been opened, modified, repaired, processed, replaced or installed, or any other work has been performed in relation to or that affects any product, by a non-certified or otherwise unauthorised person, (e) any other act or omission has occurred that otherwise has resulted in a loss of product warranty.
- h) In the event **Sunsynk Ltd** determines that an alleged product or services defect did not exist or, if existed, was excluded from **Sunsynk Ltd's** liability by **Sunsynk Ltd's** Terms & Conditions, Customer shall reimburse **Sunsynk Ltd** for all costs and expenses incurred by **Sunsynk Ltd** as a result of **Sunsynk Ltd's** attempt to repair, replace or re-perform.
- i) **Sunsynk Ltd** is not liable for product(s) damaged through installer error or installation error regardless of the installer's status of having attended or not attended the **Sunsynk Ltd** provided Certified Installer Training. Determination of warranty coverage is as set out in this Warranty document, and at the discretion of the **Sunsynk Ltd** Service team.
- j) EXCEPT AS OTHERWISE PROVIDED BY APPLICABLE LAW, THE FOREGOING REMEDIES STATE **SUNSYNK LTD's** SOLE AND EXCLUSIVE OBLIGATION AND YOUR SOLE AND EXCLUSIVE REMEDY FOR A BREACH OF THE FOREGOING LIMITED WARRANTY.

8.6. Product Suitability

Sunsynk Ltd's products are designed to meet stated EU AND U.S. Safety Standards and Regulations. Because local safety standards and regulations vary significantly, **Sunsynk Ltd** cannot guarantee that products meet all applicable requirements in each locality. Customer assumes responsibility for compliance with such safety standards and regulations in the localities in which a product will be shipped, sold or used. Before purchase and use of any product, Customer shall review the product application, and national and local codes and regulations, and must verify that the use and installation of the product will be in compliance therewith.

8.7. Warranty Term

- a) The warranty period ('Warranty Period') for the Covered Product commences upon the initial purchase from **Sunsynk Ltd** or from an Authorised Dealer (as evidenced by the purchase invoice date).
- b) The Warranty Period for the Product Warranty (Section 3) terminates upon the earlier of (i) 123 months after purchase of the Covered Product, or (ii) 120 months after installation of the Covered Product by an Authorised Dealer.
- c) The Warranty Period for the Performance Warranty (Section 4) terminates upon the earlier of (i) 123 months after purchase of the Covered Product, or (ii) 120 months after installation of the Covered Product by an Authorised Dealer, or (iii) 10,000 full (100%) charging cycles of the Battery Pack.

8.8. Persons Entitled to Make Warranty Claims

Warranty claims may only be made by the original purchaser of a Covered Product, if the Covered Product has been registered through **Sunsynk Ltd's** product registration website during the installation process by the Authorised Dealer, or a person to whom the title to the Covered Product has been transferred, provided that the Covered Product remains in its original location and configuration (including, without limitation, a purchaser of a building, who acquires the covered product as a fixture to the building).

8.9. Claim Notice

- a) If you believe that you have a justified claim covered by this Factory Warranty, you must submit the claim in writing ('Claim Notice') to **Sunsynk Ltd** within the applicable Warranty Period to **Sunsynk Ltd's** address set forth above, or such future address as **Sunsynk Ltd** may provide from time to time. Any Claim Notice must include the following information:
 - the serial number of the Covered Product for which a Claim Notice is being sent;
 - a copy of the dated purchase receipt for the Covered Product;
 - a copy of the installation protocol for the Covered Protocol signed by an Authorised Dealer;
 - information about the use of the Covered Product in reasonable detail;
 - information about the defect in reasonable detail.
- b) Upon receipt of your Claim Notice **Sunsynk Ltd** may ask for further information or claim verification from you, receipt of which will be required prior to processing the claim.
- c) Upon acceptance of your warranty claim, **Sunsynk Ltd** may require that you send the Covered Product at your own costs to a **Sunsynk Ltd** warranty claim centre located in the world.

8.10. Warranty Limitations

8.10.1. Excluded Warranty Claims

- a) **Sunsynk Ltd** makes no warranties, either expressed or implied, orally, or in writing, with respect to any other warranty coverage except those expressly stated in this limited Factory Warranty.
- b) The Factory Warranty does not cover damages that occur due to:
- Transport damage;
 - Installation or commissioning through any person which is not an Authorised, Certified Dealer;
 - Failure to observe the user manual, maintenance regulations and intervals;
 - Modifications, changes, or attempted repairs, except as conducted by an Authorised Dealer;
 - Incorrect use or inappropriate operation;
 - Insufficient ventilation of the Covered Product;
 - Failure to observe the applicable safety regulations;
 - Force majeure.

This factory warranty does not cover cosmetic defects which do not directly influence energy production, or degrade form, fit, and function.

Claims that go beyond the scope of this limited Factory Warranty, in particular claims for compensation for direct or indirect damages arising from the defective device, for compensation for costs arising from disassembly and installation, or loss of profits, are expressly NOT covered by this Factory Warranty.

In no event will **Sunsynk Ltd** be held responsible or liable for any personal injuries resulting from the use of the system, or for any other damages, whether direct, indirect, incidental, or consequential; even if **Sunsynk Ltd** has been advised of such damages.

8.10.2. Internet Connectivity

As a condition to this limited Factory Warranty, **Sunsynk Ltd** requires continuous online access to the Covered Product via internet connection. This Factory Warranty requires that the Covered Product will be properly connected to the internet through your internet provider and expressly excludes any defects resulting from your acts or omissions that prevent **Sunsynk Ltd** from accessing the Covered Product online as may be required for software upload or performance data download.

8.11. General

This limited Factory Warranty and the terms contained herein supersede all statements contained in any and all user manuals, installation manuals, other equipment literature or catalogues, or orally with respect to any product or performance warranty for Covered Products.



Australia Main Dealer

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Manufacturer

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